AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Claims 1-99 (cancelled).

Claim 100 (original): A process for adjusting the composition of each of a plurality of dispersions comprising particulate matter and a fluid medium, the process comprising:

concurrently exposing each of a plurality of filter membranes to a dispersion of said plurality of dispersions, the dispersion to which each of said plurality of membranes is exposed being separate from any dispersion to which any other of said plurality of membranes is exposed;

concurrently causing fluid to flow through each of said membranes to form a permeate downstream of each membrane and a retentate upstream thereof, thereby forming a plurality of separate permeates and a plurality of separate retentates; and

introducing a wash liquid into each of said separate retentates.

Claim 101 (original): A process as set forth in claim 100 further comprising flow of the plurality of permeates into a plurality of permeate reception zones, each of said plurality of permeates flowing into a reception zone that is separate from any reception zone into which any other of said plurality of permeates flows.

Claim 102 (original): A process as set forth in claim 101 wherein said plurality of permeate reception zones comprises an array of permeate reception zones oriented for parallel delivery of said plurality of permeates to said plurality of reception zones.

Claim 103 (previously presented): A process as set forth in claim 100 wherein each of said plurality of dispersions is separately exposed to a filtration membrane in one of a plurality of spatially discrete vessels.

Claim 104 (previously presented): A process as set forth in claim 103 wherein said plurality of vessels comprises an array of vessels oriented for parallel filtration operations.

Claim 105 (previously presented): A process as set forth in claim 100 wherein each of said plurality of filter membranes is supported on one of a plurality of filtration heads.

Claim 106 (previously presented): A process as set forth in claim 105 wherein each of said filtration heads comprises a permeate conduit for flow of permeate in a filtering direction and a backflush conduit for introducing a backflush liquid to each of said plurality of filter membranes in a backflushing direction.

Claim 107 (previously presented): A process as set forth in claim 100 wherein fluid flows through said filter membranes in a filtering direction during a filtration phase and further comprising a backflushing phase wherein a liquid stream is introduced to said plurality of filter membranes in a backflushing direction.

Claim 108 (previously presented): A process as set forth in claim 100 wherein said plurality of filter membranes comprises an array of filter membranes oriented for parallel delivery of said plurality of dispersions to said plurality of membranes.

Claims 109-160 (canceled).

Claim 161 (previously presented): An apparatus for filtration of each of a plurality of dispersions of particulate solids in fluid media, the apparatus comprising:

a plurality of filter membranes, each adapted for flow of fluid therethrough in a filtering direction to form a plurality of separate permeate streams;

a plurality of permeate conduits, each of said permeate conduits being positioned to receive permeate from a membrane of said plurality of membranes that is separate from any of said plurality of membranes from which any other of said plurality of permeate conduits is positioned to receive permeate; and

a plurality of backflush conduits for directing a backflushing liquid through said filter membranes, each of said backflush conduits being oriented for backflushing a membrane that is separate from any membrane which any other of said plurality of backflush conduits is oriented to backflush.

Claim 162 (original): The apparatus as set forth in claim 161 wherein said plurality of filter membranes comprises an array of filter membranes oriented for contemporaneous parallel delivery of said plurality of dispersions to said plurality of membranes.

Claim 163 (previously presented): The apparatus as set forth in claim 162 further comprising a plurality of permeate reception zones, each of said permeate reception zones being in fluid flow communication with a membrane of said plurality, each of said plurality of reception zones being positioned to receive permeate from a membrane different from the membrane from which any other of said plurality of reception zones is positioned to receive permeate.

Claim 164 (original): The apparatus as set forth in claim 163 wherein said plurality of permeate reception zones comprises an array of permeate reception zones oriented for contemporaneous parallel delivery of said plurality of permeates to said plurality of reception zones.

Claim 165 (previously presented): The apparatus as set forth in claim 161 further comprising a plurality of spatially discrete vessels, each of said vessels being operatively associated with a membrane of said plurality of membranes for exposure of the membrane to a dispersion contained in the vessel, the membrane with which each of said plurality of vessels is associated being separate from any membrane with which any other of said plurality of vessels is associated.

Claim 166 (original): The apparatus as set forth in claim 165 wherein said plurality of vessels comprises an array of vessels oriented for contemporaneous parallel filtration operations.

Claim 167 (previously presented): The apparatus as set forth in claim 161 wherein said filter membranes, permeate conduits and backflush conduits comprise an assembly.

Claim 168 (original): The apparatus as set forth in claim 167 further comprising a robot arm connected to said assembly.

Claim 169 (original): The apparatus as set forth in claim 168 wherein said robot arm can be adapted for locating said assembly such that said filter membranes are in a filtering position.

Claim 170 (original): The apparatus as set forth in claim 169 wherein said robot arm can be adapted for movement of said assembly in the vertical direction.

Claim 171 (original): The apparatus as set forth in claim 170 wherein said assembly is adapted for placement in a filtering position such that each of said filter membranes is positioned to receive a dispersion separate any of the other dispersions of said plurality of dispersions.

Claim 172 (original): The apparatus as set forth in claim 171 wherein said assembly is adapted for placement in a filtering position by lowering said assembly.

Claim 173 (original): The apparatus as set forth in claim 172 wherein said assembly is adapted for placement in a filtering position by securing said assembly in a fixed position.

Claim 174 (original): The apparatus as set forth in claim 173 wherein said assembly comprises a monolithic support comprising a plurality of spatially discrete filtering regions, each of said plurality of filtering regions comprising a filter membrane, a spatially discrete backflush conduit and a spatially discrete permeate conduit.

Claim 175 (original): The apparatus as set forth in claim 173 wherein said assembly comprises a plurality of spatially discrete filtration heads, each of said plurality of filtration heads comprising a filter membrane, a permeate conduit and a backflush conduit.

Claim 176 (original): The apparatus as set forth in claim 175 wherein said assembly comprises means for securing said filtration heads in an array.

Claim 177 (original): The apparatus as set forth in claim 175 further comprising a plurality of vessels containing dispersion specimens and being arranged in an array corresponding to the array of said filtration heads, said assembly adapted for placement in a position whereby each of said plurality of filter membranes is immersed in the dispersion present in one of said vessels separate from any vessel in which any other of said filter membranes is positioned.

Claim 178 (withdrawn): A process for adjusting the composition of a dispersion comprising particulate matter and a fluid medium, the process comprising:

exposing a surface of a filter membrane to a dispersion comprising particulate matter and a fluid medium, the dispersion having a first concentration of the particulate matter in the fluid medium,

removing some of the fluid medium from the dispersion by causing fluid to flow through the membrane to form a permeate downstream of the membrane and a retentate upstream thereof, whereby the concentration of the particulate matter in the fluid medium of the retentate increases over time relative to the first concentration of the dispersion, and

sampling the retentate intermittently over time to form at least two retentate samples, the at least two retentate samples having different concentrations of particulate matter in the fluid medium.

Claim 179 (withdrawn): The process of claim 178 wherein the filter membrane is supported on a filtration head.

Claim 180 (withdrawn): The process of claim 178 further comprising introducing a wash liquid into the retentate.

Claim 181 (withdrawn): The process of claim 178 wherein the retentate is sampled using a automated sampling robot.

Claim 182 (withdrawn): The process of claim 178 wherein the retentate samples are deposited on a common substrate.

Claim 183 (withdrawn): The process of claim 182 further comprising analyzing the retentate samples for a property of interest.

Claim 184 (withdrawn): A process for adjusting the composition of each of a plurality of dispersions comprising particulate matter and a fluid medium, the process comprising:

concurrently exposing each of a plurality of filter membranes to a dispersion of said plurality of dispersions, the dispersion to which each of said plurality of membranes is exposed being separate from any dispersion to which any other of said plurality of membranes is exposed;

removing some of the fluid medium from each of the plurality of dispersions by concurrently causing fluid to flow through each of said membranes to form a permeate downstream of each membrane and a retentate upstream thereof, thereby forming a plurality of separate permeates and a plurality of separate retentates; and

sampling each of the plurality of retentates to form at least two separate retentate samples.

Claim 185 (withdrawn): The process of claim 184 wherein each of the filter membranes are supported on discrete filtration heads.

Claim 186 (withdrawn): The process of claim 184 further comprising introducing a wash liquid into each of the plurality of retentates.

Claim 187 (withdrawn): The process of claim 184 wherein the plurality of retentates are sampled using one or more automated sampling robots.

Claim 188 (withdrawn): The process of claim 184 wherein the retentate samples are deposited on a common substrate.

Claim 189 (withdrawn): The process of claim 188 further comprising analyzing each of the plurality of retentate samples for a property of interest.

Claim 190 (withdrawn): The process of claim 178 further comprising analyzing the retentate samples for a property of interest.

Claim 191 (withdrawn): The process of claim 184 further comprising analyzing each of the plurality of retentate samples for a property of interest.

[NO FURTHER AMENDMENTS ON THIS PAGE]